AMENDMENTS TO THE CLAIMS

1. (currently amended) An X-ray diffractometer, comprising:

a sample stage for mounting a sample, the sample stage being rotatable about an axis;

a double pinhole collimator for directing X-ray radiation to a sample on the sample stage;

a detector for detecting X-rays diffracted by the sample; and

an analyser crystal arranged between the sample stage and the detector to direct X-rays diffracted by the sample onto the detector,

wherein the analyser crystal and detector are rotatable as a unit about an axis that is coaxial with the axis of rotation of the sample stage.

2. (currently amended) An X-ray diffractometer according to claim 1, wherein the size of the pinhole of the double pinhole collimator nearest the sample stage is adjustable for providing an X-ray spot on the sample of variable size.

3. (currently amended) An X-ray diffractometer according to claim 1, wherein a slit is arranged between the sample stage and the detector.

4. (currently amended) An X-ray diffractometer according to claim 3, wherein the slit is arranged in front of the detector.

5. (currently amended) An X-ray diffractometer according to claim 1, and further comprising a drive for rotating the sample stage and the detector and analyser crystal with a ratio of rotation angles of substantially 1:2.